

JAMAICAN BLUE-GREEN ALGAE COLLECTIONS OF J. C. STRICKLAND¹

W. JOHN HAYDEN

Professor John C. Strickland (1915-1980) devoted much of his life to teaching biology, botany, and phycology at the University of Richmond. Throughout his academic career he maintained a keen interest in the Myxophyceae, or blue-green algae, studying their culture, cytology, and taxonomy (Drouet & Strickland, 1942; Strickland, 1940, 1946). Most of his collections of these and other algae were made in Virginia and are housed in the herbarium maintained by the Department of Biology, University of Richmond. However, he also made four trips to Jamaica in the years 1966-1971 before his health deteriorated to the extent that field work, and even processing of specimens, became impossible. Recently, Dr. Strickland's Jamaican collections of Myxophyceae have been identified through the kindness and diligence of Dr. Francis Drouet of the Academy of Natural Sciences, Philadelphia. This brief note provides an overview of Dr. Strickland's Jamaican collections, which constitute a significant contribution to the cryptogamic flora of the island.

The following list consists of 154 records of 17 species from nine parishes of Jamaica. With the exception of *Entophysalis deusta*, all the records are from freshwater or terrestrial habitats. Taxonomy and nomenclature follow Drouet and Daily (1956) and Drouet (1968, 1973, 1978, 1981). Habitat descriptions merely summarize label data; actual ecological ranges in Jamaica for these algae may be greater than indicated. To save space, locality data are limited to parish. Mixed collections are commonplace with these microorganisms. Collection numbers listed for each species include every gathering in which that species is present, regardless of its relative abundance in mixed collections. The collection numbers also provide some indication of abundance. Complete sets of specimens have been deposited in UJ and PH, as well as in the Department of Biology, University of Richmond.

¹Publication supported in part by the Faculty Research Committee, University of Richmond.

- Anabaina licheniformis* Bory; over bare soil, roadside ditches. Portland: 2016. St. Mary: 1994.
- Anacystis montana* (Lightf.) Dr. & Daily; moist limestone rock faces. Manchester: 2011. Portland: 1959. St. Mary: 1987.
- Calothrix parietina* (Näg.) Thur.; submerged or exposed limestone rocks. St. Catherine: 2074, 2075, 2079, 2082. St. Mary: 2092.
- Coccochloris stagnina* Spreng.; moist limestone rock faces. Clarendon: 2038. Portland: 1959, 2019. St. Andrew: 2025. St. Ann: 2000. St. Mary: 1980, 1983, 1995. St. Thomas: 1975.
- Entophysalis deusta* (Menegh.) Dr. & Daily; salt pond beach. St. Thomas: 1978.
- Microcoleus lyngbyaceus* (Kütz) Crouan; floating or submerged in standing water. Clarendon: 2074. St. Catherine: 2077.
- Microcoleus vaginatus* (Vauch.) Gom.; on bare soil. St. Catherine: 2078.
- Nostoc commune* Vauch.; standing water, moist soil, among mosses, moist rocks. Clarendon: 2036, 2048, 2053. Manchester: 2012. Portland: 2017, 2018, 2019, 2021, 2067. St. Andrew: 1963, 2022. St. Ann: 2006, 2064, 2065. St. Catherine: 2073. St. Mary: 1983, 1993. St. Thomas: 1975.
- Oscillatoria principes* (Vauch.) Gom.; floating in pool. St. Catherine: 2077.
- Oscillatoria retzii* Ag.; wet soil and rock crevices. Clarendon: 2046, 2049. St. Mary: 2060, 2071. St. Thomas: 1976.
- Palmogloea protuberans* (Sm. & Saw.) Kütz; limestone cliff faces. St. Ann: 2003, 2004.
- Porphyrosiphon notarisii* (Menegh.) Kütz; on exposed rocks and on submerged debris in hot springs at Bath (water temperature 45° C). Portland: 1957, 2060a, 2060b. St. Thomas: 1968, 1979.
- Schizothrix calcicola* (Ag.) Gom.; submerged or exposed limestone rocks, over wet mud. Clarendon: 2034, 2037. St. Andrew: 2023. St. Ann: 2000, 2084. St. Catherine: 2075. St. Mary: 1995, 2069, 2071, 2082.
- Schizothrix friesii* (Ag.) Gom.; over moist soil. St. Mary: 1991.
- Schizothrix rubella* Gom.; over moist soil, moist rocks. Clarendon: 2037, 2057. Portland: 2067. St. Andrew: 2013, 2014. St. Mary: 2081, 2088. St. Thomas: 1965.
- Schizothrix tenerrima* (Gom.) Dr.; over moist soil, moist rocks. Clarendon: 2043. Portland: 2067.

Scytonema hofmannii Ag.; nearly ubiquitous on moist surfaces, especially rocks, but also soil, tree trunks, and among mosses and lichens. Clarendon: 2031, 2032, 2033, 2034, 2035, 2036, 2041, 2043, 2044, 2045, 2049, 2051, 2052, 2057, 2058. Manchester: 2010, 2011. Portland: 1956, 1958, 1959, 1961, 1962, 1974, 2060b, 2061, 2067. St. Andrew: 1963, 1964, 2013b, 2024, 2026, 2027, 2027a. St. Ann: 1999, 2000, 2001, 2002, 2003, 2004, 2066, 2068, 2080, 2083, 2085, 2086, 2087. St. Catherine: 2028, 2076. St. Elizabeth: 2059. St. Mary: 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1988, 1990, 1991, 1992, 1995, 1996, 1997, 1998, 2088, 2089, 2090, 2093. St. Thomas: 1965, 1966, 1967, 1969, 1970, 1971, 1972, 1973, 1975, 1977.

Stigonema ocellatum (Dillw.) Thur.; on roadside bank. Portland: 2063.

LITERATURE CITED

- DROUET, F. 1968. Revision of the classification of the Oscillatoriaceae. Monogr. Acad. Nat. Sci., Philadelphia **16**: 1-341.
- . 1973. Revision of the Nostocaceae with cylindrical trichomes. Hafner Press, New York.
- . 1978. Revision of the Nostocaceae with constricted trichomes. Nova Hedwigia **57** (Beihefte): 1-258.
- . 1981. Revision of the Stigonemataceae. Nova Hedwigia **66** (Beihefte): 1-221.
- , & W. DAILY. 1956. Revision of the coccoid Myxophyceae. Butler Univ. Bot. Studies **10**: 1-218.
- , & J. C. STRICKLAND. 1942. *Arthrospira Khannae*. In: F. Drouet. Studies in Myxophyceae I. Field Mus. Nat. Hist. Bot. Ser. **20**: 141.
- STRICKLAND, J. C. 1940. The Oscillatoriaceae of Virginia. Amer. J. Bot. **27**: 628-633.
- . 1946. The culture of certain marine algae. Science **103**: 112-113.

DEPARTMENT OF BIOLOGY
UNIVERSITY OF RICHMOND
RICHMOND, VIRGINIA 23173